

AMENDMENTS TO THE CLAIMS

1. **(Previously presented)** A method for the preparation of virus-inactivated thrombin comprising the steps of:

- (a) solvent-detergent virus inactivating of a solution comprising prothrombin and factor X;
- (b) loading the product of step (a) onto an anion exchange medium;
- (c) washing the anion exchange medium to remove reagents used for the solvent-detergent virus inactivating in step (a); and
- (d) activating the prothrombin on the anion exchange medium to form thrombin by addition of metal ions.

2. **(Previously presented)** The method according to claim 1, wherein the solution comprising prothrombin and factor X is a prothrombin complex.

3. **(Previously presented)** A method for the preparation of virus-inactivated thrombin comprising the steps of:

- (a) solvent-detergent virus inactivating of a solution comprising factor X;
- (b) loading the product of step (a) onto an anion exchange medium;
- (c) washing the anion exchange medium to remove reagents used for the solvent-detergent virus inactivating in step (a);
- (d) activating the factor X on the anion exchange medium to form factor Xa by addition of metal ions; and
- (e) loading virus-inactivated prothrombin onto the anion exchange medium such that thrombin is generated.

4. **(Previously presented)** The method according to claim 1 or 3 wherein the metal ions are divalent metal ions.

5. **(Previously presented)** The method according to claim 4 wherein the divalent metal ions are magnesium and/or calcium ions.

6. **(Previously presented)** The method according to claim 1, further comprising the step of

- (e) selectively eluting the thrombin from the anion exchange medium.

7. **(Previously presented)** The method according to claim 6, further comprising the steps of

- (f) passing the product of step (e) through a filter which retains pathogens;
- (g) adding a divalent metal ion and a carbohydrate to the product of step (f), and
- (h) freeze-drying and heat-treating the product of step (g) to inactivate viruses.

8-13. **(Canceled)**

14. **(Previously presented)** The method according to claim 3, further comprising the step of

- (f) selectively eluting the thrombin from the anion exchange medium.

15. **(Previously presented)** The method according to claim 14, further comprising the steps of

- (g) passing the product of step (f) through a filter which retains pathogens;
- (h) adding a divalent metal ion and a carbohydrate to the product of step (g), and
- (i) freeze-drying and heat-treating the product of step (h) to inactivate viruses.

16. **(New)** A method for the preparation of virus-inactivated thrombin comprising the steps of:

- (a) loading a solution comprising prothrombin and factor X onto an anion exchange medium; and
- (b) solvent-detergent virus inactivating of the prothrombin and factor X on the anion exchange medium.
- (c) washing the anion exchange medium to remove reagents used for the solvent-detergent virus inactivating in step (a); and
- (d) activating the prothrombin on the anion exchange medium to form thrombin by addition of metal ions.

17. **(New)** The method according to claim 16 wherein the metal ions are divalent metal ions.

18. **(New)** The method according to claim 17 wherein the divalent metal ions are magnesium and/or calcium ions.

19. **(New)** The method according to claim 16, further comprising the step of
(e) selectively eluting the thrombin from the anion exchange medium.

20. **(New)** The method according to claim 19, further comprising the steps of
(f) passing the product of step (e) through a filter which retains pathogens;
(g) adding a divalent metal ion and a carbohydrate to the product of step (f), and

(h) freeze-drying and heat-treating the product of step (g) to inactivate viruses.

21. (New) A method for the preparation of virus-inactivated thrombin comprising the steps of:

(a) loading a solution comprising prothrombin and factor X onto an anion exchange medium; and

(b) solvent-detergent virus inactivating of the prothrombin and factor X on the anion exchange medium.

(c) washing the anion exchange medium to remove reagents used for the solvent-detergent virus inactivating in step (a);

(d) activating the factor X on the anion exchange medium to form factor Xa by addition of metal ions; and

(e) loading virus-inactivated prothrombin onto the anion exchange medium such that thrombin is generated.

22. (New) The method according to claim 21 wherein the metal ions are divalent metal ions.

23. (New) The method according to claim 22 wherein the divalent metal ions are magnesium and/or calcium ions.

24. (New) The method according to claim 21, further comprising the step of
(e) selectively eluting the thrombin from the anion exchange medium.

25. (New) The method according to claim 24, further comprising the steps of

(f) passing the product of step (e) through a filter which retains pathogens;

(g) adding a divalent metal ion and a carbohydrate to the product of step (f), and

(h) freeze-drying and heat-treating the product of step (g) to inactivate viruses.

26. (New) The method according to Claim 1, wherein step (d) is performed without addition of phospholipids.

27. (New) The method according to Claim 3, wherein step (d) is performed without addition of phospholipids.

28. (New) The method according to Claim 16, wherein step (d) is performed without addition of phospholipids.

29. (New) The method according to Claim 21, wherein step (d) is performed without addition of phospholipids.